REMARKS

Status of Claims:

Claims 1-45 are present for examination.

Abstract:

The abstract has been amended, and is now believed to be in a proper format.

Specification:

The disclosure is objected to because of the following informalities: Applicant recites "...an allowable traffic allowable..." in paragraphs 15, 26, 36, and 46. The Examiner suggested that applicant delete the second recitation of "allowable" in the phrase.

The disclosure has been amended so that paragraphs 15, 26, 36, and 46 no longer recite the phrase "an allowable traffic allowable".

Claim Objections:

Claims 9, 21, 31, and 41 are objected to because of the following informalities: they recite "...an allowable traffic allowable...". The Examiner suggested that applicant delete the second recitation of "allowable" in the phrase.

Claims 9, 21, 31, and 41 have been amended so that the claims no longer recite the phrase "an allowable traffic allowable".

Claim Rejections under 35 U.S.C. 112:

Claims 14, 17-23, 25, 26, 39, and 41 are rejected under 35 U.S.C. 112, second paragraph, as having insufficient antecedent basis for limitations in the claims.

With respect to claims 14, 17-23, 25, 26, 39, and 41, the rejection is respectfully traversed.

Claim 14 has been amended to remove the limitation "said memory". Thus, claim 14, as amended, is believed to comply with the requirements of 35 U.S.C. 112, second paragraph.

Claims 17-23 and 25 have been amended to remove the limitation "said memory". Thus, claims 17-23 and 25, as amended, are believed to comply with the requirements of 35 U.S.C. 112, second paragraph.

Claim 26 has been amended to recite "user identifiers" instead of "said user identifier" on page 49, line 24. Thus, claim 26, as amended, is believed to comply with the requirements of 35 U.S.C. 112, second paragraph.

Claim 39 has been amended to remove the limitation "said application server". Thus, claim 39, as amended, is believed to comply with the requirements of 35 U.S.C. 112, second paragraph.

Claim 41 has been amended to recite "a level of traffic" instead of "said traffic" on page 55, line 21. Thus, claim 41, as amended, is believed to comply with the requirements of 35 U.S.C. 112, second paragraph.

Claim Rejections under 35 U.S.C. 102 and 103:

Claims 1, 3-8, 11, 13, 14, 16-20, 23, 25, 26-30, 33, 35, 36-40, 43, and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanimoto et al. (U.S. Patent Number 6,075,776) (hereinafter Tanimoto).

Claims 2, 12, 15, 24, 34, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanimoto and further in view of Rao (U.S. Patent Number 6,789,118).

Claims 9, 10, 21, 22, 31, 32, 41, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanimoto and further in view of McNamara (U.S. Patent Number 6,262,976).

With respect to claims 1-45, as amended, the rejections are respectfully traversed.

Independent claim 1, as amended, recites a communications system comprising:

"a server;

a client terminal; and

a communications network which interconnects said server and said client terminal;

said client terminal including means for establishing communication with said server;

said server including:

a memory for storing information about a plurality of separate and distinct disconnection conditions regarding disconnection of client terminals;

decision means for monitoring a connection state between said client terminal and said server and deciding whether or not said connection state corresponds to at least one of said disconnection conditions; and

disconnection means for disconnecting said client terminal when it is decided that said connection state corresponds to said at least one of said disconnection conditions." (Emphasis Added).

A communications system including the above-quoted features has the advantage that a server includes a memory for storing information about a plurality of separate and distinct disconnection conditions, and includes a disconnection means for disconnecting a client terminal when a connection state between the client terminal and the server corresponds to at least one of the plurality of disconnection conditions. Thus, for example, when a service user having a client terminal forms a contract for a service plan with a service provider having a server, a disconnection condition for the service plan can be selected from among a plurality of separate and distinct disconnection conditions. Such separate and distinct disconnection conditions may include parameters, such as (a) a maximum communication time period; (b) a maximum non-communication time period; (c) a maximum data volume; (d) a maximum simultaneous jointer count; and (e) a maximum allowable traffic level. (Specification; FIG. 2; page 23, lines 1-7; page 26, lines 9-14; page 28, lines 13-18; page 30, lines 4-9; page 31, line 22 to page 32, line 2; page 33, lines 13-18).

Also, by allowing for a service provider to select among a plurality of separate and distinct disconnection conditions, the service provider may, for example, decide to use

different conditions depending on user actions. For instance, if users are to be disconnected based on a non-communication time, but the users purposefully create a situation in which data is always flowing on a communication line so that they are not disconnected, then the service provider may decide to switch the users to different disconnection conditions, such as maximum data volume, so that they will eventually be disconnected. Such a communications system would help to prevent wastefulness of resources so that a service provider does not have to make extra investments in expanding a number of communication lines to service all users at all times. (Specification; page 2, line 1 to page 3, line 4; page 38, lines 1-3).

Tanimoto neither discloses nor suggests a communications system including the above-quoted features. In the system of Tanimoto, a remote access client only **detects** whether a terminal has been disconnected from a remote network and does not disconnect the terminal. (Tanimoto; abstract; column 1, lines 10-13 and 38-41; column 2, lines 22-25 and 31-57; column 3, lines 1-3; column 6, lines 59-61; column 7, lines 21-25). The detection of a disconnection of a terminal in Tanimoto is performed by a remote access client that resets a timer each time the terminal sends a packet, and that **judges** that the terminal has been disconnected from a remote network when the timer value exceeds a predetermined threshold. (Tanimoto; column 6, lines 55-67). When the remote access client detects that the terminal has been disconnected, a home address management table is updated to reflect that the terminal has been disconnected. (Tanimoto; column 7, lines 12-26).

Because the system in Tanimoto only detects whether a terminal has been disconnected and does not disconnect the terminal, even if a false detection is made and the terminal location is deleted from the home address management table, the terminal can still send packets in the system and, thus, is not disconnected. (Tanimoto; column 5, lines 26-35). The terminal is not disconnected because, in Tanimoto, it is not necessary for a terminal to have an entry in a **home address** management table in order for the terminal to send packets, as long as the terminal is registered in an **initial information** management table. (Tanimoto; column 5, lines 36-55). In other words, if a terminal in Tanimoto has an entry in an initial information management table, then the terminal can send packets even if no entry exists for the terminal in a home address management table. (Tanimoto; column 5, lines 36-64). When

the system in Tanimoto detects that a terminal has been disconnected, a remote access client only deletes an entry in the home address management table and not the initial information management table and, thus, the terminal would still be able to send packets if it was falsely detected as being disconnected. (Tanimoto; column 7, lines 12-20). Thus, the system of Tanimoto does not disconnect a terminal.

Furthermore, the system of Tanimoto does not have a memory for storing information about a plurality of separate and distinct disconnection conditions. In Tanimoto, there is only a single predetermined threshold value for judging when a terminal has been disconnected. (Tanimoto; column 6, lines 55-61). Thus, the system of Tanimoto is not able to store a plurality of disconnection conditions and there are no separate and distinct disconnection conditions in the system of Tanimoto.

Therefore, independent claim 1, as amended, is neither disclosed nor suggested by the cited prior art and, hence, is believed to be allowable.

Independent claim 3 recites a communications system with similar features as features of the communications system of independent claim 1. Therefore, independent claim 3 is believed to be allowable for at least the same reasons that independent claim 1 is believed to be allowable.

Independent claim 14 recites a communications method with similar features as features of the communications system of independent claim 1. Therefore, independent claim 14 is believed to be allowable for at least the same reasons that independent claim 1 is believed to be allowable.

Independent claim 16 recites a communications method with similar features as features of the communications system of independent claim 1. Therefore, independent claim 16 is believed to be allowable for at least the same reasons that independent claim 1 is believed to be allowable.

Independent claim 26 recites a server with similar features as features of a server of the communications system of independent claim 1. Therefore, independent claim 26 is

believed to be allowable for at least the same reasons that independent claim 1 is believed to be allowable.

Independent claim 36 recites a recording medium in which a program is stored, said program causing a server to execute a process with similar features as features of a server of the communications system of independent claim 1. Therefore, independent claim 36 is believed to be allowable for at least the same reasons that independent claim 1 is believed to be allowable.

The dependent claims are deemed allowable for at least the same reasons indicated above with regard to the independent claims from which they depend.

Conclusion:

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date April 7, 2005 By Justin Sobaje

FOLEY & LARDNER LLP
Customer Number: 22428
Telephone: (310) 975-7965
Facsimile: (310) 557-8475

Justin M. Sobaje
Registration No. 56,252